

AMENDMENTS TO THE ABSTRACT:

Kindly replace the Abstract of the Disclosure with the following new Abstract:

A method for manufacturing a supercharger rotor by casting a profile portion of a supercharger rotor and a shaft penetrating the same, having the steps of: first cutting a left and right helical cross portion on a surface of the shaft connected to the profile portion, wherein the cross portion includes a right handed helical groove and a left handed helical groove, and these grooves cross each other; and casting the profile portion around the shaft in die-casting. In this way, a plurality of profile portion divided metal molds 12 surround a profile portion 11a of a supercharger rotor 11 to allow division and. A pair of end metal molds 14 and 15 surround both rotor ends of the rotor. A helical core 16 is attached to one end metal mold 14 so as to be helically passed through the profile portion of the rotor. A rotor-shaped cavity 13 is formed inside by the profile portion divided metal molds, and the end metal molds. Hot metal is pressurized, and injected and solidified in the cavity, and t. Then, the end metal mold 14 having the helical core is pulled out by being rotated along a helical line.